

Claim 12 is still pending in this continuation application.

Please add claims 51-62.

-- 51. A battery having a strength indicator comprising:

a rechargeable dry cell battery having a first terminal and a second terminal;

a battery strength indicator formed in a layer attached to a side of said battery which undergoes a visible change when subject to a predetermined voltage output of said battery and a first conductor electrically connected between one end of said indicator and said first battery terminal; and

a battery switch comprising a resilient, non-conductive, deformable layer on a side of said battery, a switch chamber disposed beneath said resilient layer, and a second conductor extending from said switch chamber and connected to the other end of the indicator, said portion of said second conductive lead within its said switch chamber comprising a switch contact, said battery switch being bias in an electrically open position,

whereby upon pressing of the resilient layer over said switch chamber, the switch contact will be placed in electric contact with a conductive layer in electrical contact with said second battery terminal, thereby placing the indicator in electrical contact across the terminals of the battery to quickly indicate to the user the strength of the battery.

~~52. A battery package having a battery strength indicator comprising:~~

~~a package frame~~

~~rechargeable batteries mounted on said package frame, each of said batteries having first and second terminals;~~

5 a battery strength indicator mounted on said package frame and electrically  
6 connected to a first terminal of one of said batteries; and  
7 a battery switch comprising a resilient, non-conductive layer disposed over said  
8 package frame, a switch chamber disposed beneath said resilient layer, a pair  
9 of switch contacts normally spaced apart in said chamber, one of said switch  
10 contacts being electrically connected to said battery strength indicator and the  
11 other of said switch contacts being electrically connected to a second terminal  
12 of one of said batteries, said battery switch being biased in an electrically open  
13 position,  
14 whereby upon pressing of the resilient layer over said switch chamber, the switch  
15 contacts will place said indicator in electrical contact across the terminal of said  
16 batteries.

1 53. The battery of claim 12 wherein said battery strength indicator comprises:

- 2 A) a dielectric layer;  
3 B) a conductive layer above or below the dielectric layer, one end of said  
4 conductive layer being electrically connected to said first battery terminal and  
5 the other end of said conductive layer being electrically connected to said  
6 switch chamber;  
7 C) a temperature sensitive color indicator material in thermal contact with the  
8 conductive layer, characterized in that:  
9 1) the conductive layer has  
10 i) sufficient heat generating capacity to effect a change in the temperature  
11 sensitive color indicator material and

12 ii) means to transfer sufficient heat generated by the conductive layer  
13 to the temperature sensitive color indicator material to change the color  
14 thereof and indicate voltage when the voltage indicator is in contact  
15 with a battery housing.

1 54. The battery of claim 12 wherein said battery strength indicator comprises a  
2 chemical redox composition which changes color when the voltage potential across  
3 the terminals of the battery crosses a pre-determined voltage.

1 55. The battery of claim 12 wherein said battery strength indicator comprises a  
2 liquid crystal composition that changes phases when the voltage potential across the  
3 terminals of the battery crosses a pre-determined voltage.

1 56. The battery of claim 12 wherein said battery strength indicator comprises a  
2 conductive layer which has a reduced cross-sectional area in contact with a heat  
3 sensitive color indicating material adapted to undergo a color change when the  
4 temperature of the reduced cross-sectional area of the conductive layer rises to a pre-  
5 determined temperature when the voltage potential across the terminals of the battery  
6 crosses a pre-determined voltage.

1 57. The battery of claim 12 wherein said battery strength indicator comprises a  
2 light emitting diode that undergoes a visible change when the voltage potential across  
3 the terminals of the battery crosses a pre-determined voltage.

1 58. The battery of claim 51 wherein said battery strength indicator comprises

2 A) a dielectric layer;

3 B) a conductive layer above or below the dielectric layer, one end of said  
4 conductive layer being electrically connected to said first battery terminal and  
5 the other end of said conductive layer being electrically connected to said  
6 switch chamber;

7 C) a temperature sensitive color indicator material in thermal contact with the  
8 conductive layer, characterized in that:

9 1) the conductive layer has

10 i) sufficient heat generating capacity to effect a change in the temperature  
11 sensitive color indicator material and

12 ii) means to transfer sufficient heat generated by the conductive layer to  
13 temperature sensitive color indicator material to change the color  
14 thereof and indicate voltage when the voltage indicator is in contact  
15 with a battery housing.

1 59. The battery of claim 51 wherein said battery strength indicator comprises a  
2 chemical redox composition which changes color when the voltage potential across  
3 the terminals of the battery crosses a pre-determined voltage.

1 60. The battery of claim 51 wherein said battery strength indicator comprises a  
2 liquid crystal composition that changes phases when the voltage potential across the  
3 terminals of the battery crosses a pre-determined voltage.

1 61. The battery of claim 51 wherein said battery strength indicator comprises a  
2 conductive layer which has a reduced cross-sectional area in contact with a heat  
3 sensitive color indicating material adapted to undergo a color change when the  
4 temperature of the reduced cross-sectional area of the conductive layer rises to a pre-  
5 determined temperature when the voltage potential across the terminals of the battery  
6 crosses a pre-determined voltage.

1 62. The battery of claim 51 wherein said battery strength indicator comprises a  
2 light emitting diode that undergoes a visible change when the voltage potential across  
3 the terminals of the battery crosses a pre-determined voltage. --

61. The battery of claim 51 wherein said battery strength indicator comprises a  
conductive layer which has a reduced cross-sectional area in contact with a heat  
sensitive color indicating material adapted to undergo a color change when the  
temperature of the reduced cross-sectional area of the conductive layer rises to a pre-  
determined temperature when the voltage potential across the terminals of the battery  
crosses a pre-determined voltage.